

REPORT

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**SUPPLEMENT TO
REPORT NO.**

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THIS IS UNEVALUATED INFORMATION

- The chiefs of all HV's (main administrations) and their technical managers
 A representative of the State Planning Commission
 A representative of the Central Office for Research and Technology
 A specialist on investments
 A representative of the Planning Department.

3. The following individual forecasts were made by the chiefs of the various RV's:

HV Potash and Non-metallic ores		(Units are tons (t) or thousand tons (Tt))		Remarks
Item	Unit	1954	1960	
Potash salts	Tt	1,350	1,750	Potassium products will be increased about 400 Tt
Crude potash salts	Tt	1,350	1,750	
Fluorspar	Tt	37.6	52 eff.1/	
Barium sulphate	Tt	7.5	5	Reduction because of exhaustion of sources. The 5,000 ton figure includes production from less concentrated barium sulphate. A processing plant will be built to take care of this.
Pyrrites	Tt	105	110	
Sodium sulphate remains the same.				
Magnesium sulphate	Tt	105	105	

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Item	Unit	1954	1960	Remarks
Sodium nitrate	tN 2/	300	300	
Potassium ammonium nitrate	tN 2/	10.350	10.350	

Investments		1954	In millions of DME	
Expansion-potash	DME	116	These investments include the year 1955; the total includes also construction of a flotation plant.	
Minor installations		18		
Maintenance		100		
Sinking a second shaft in the Marx-Engels-Plant		15		
Building a canal		100		
For non-mining purposes		26		
TOTAL		375		

HV General Chemistry

Item	Unit	1954	1960	Remarks
Inorganic laboratory chemicals	million DME	6.7	11	Increased production in VGB Schering and VGB Apolda
Synthetic organic tanning substances	t	3.000	6.000	This increase is largely dependent upon production of barium sulphate
Anthropene	t	6.800	16.000	
Barium carbonate	t	2.000	5.000	This increase is necessary to fulfill large orders from the Zeiss and Schott Works.
Mixed phosphate (Schmelzphosphate) Na-Mg-Phosphate)	t	6.000	10.000	Depends on the amount of charred slop (Schlempekohle) produced.
Triacetate cellulose	t	550	4.800	Maximum capacity to be reached in 1958. Since HV Heavy Chemistry has also planned a large production of this item, the products of HV General Chemistry may find outlets in the varnish industry.
Carbon dioxide	t	3.000	12.000	The necessary raw materials are available. In the case of varnishes and paints, no increase of capacity will result, but installation will be improved and developed.
Polyplaste and artificial resins as varnish base	t	3.000	6.000	Maximum capacity to be reached in 1958. Since HV Heavy Chemistry has also planned a large production of this item, the products of HV General Chemistry may find outlets in the varnish industry.
Varnishes and paints with oil base	t	29.000	46.000	
Varnishes and paints with cellulose base (partly triacetate base)	t	9.000	16.000	The necessary raw materials are available. In the case of varnishes and paints, no increase of capacity will result, but installation will be improved and developed.
Hardening of vegetable fats for margarine	t	55.000	65.000	
Fatty alcohols and sorbite	t	5.000	12.000	
Investments	Million DME			

Expansion 72
Maintenance 113 to 115

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These investments include the year 1955, but do not include branch installations

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HV Liquid Fuels (Fluessige Brennstoffe)

- a. Discussions between this HV and the Coal Division of the Ministry of Heavy Industry have not yet led to agreement. Hence the incompleteness of the figures for HV Liquid Fuels. An agreement with HV Heavy Chemistry concerning Leuna production is absolutely necessary. It is planned to increase production of tar and light oils from 1.7 million tons in 1954 to 2.5 million in 1960. Four hundred thousand tons of this are estimated to be allotted to a planned increase of brown coal production in the Lausitz region. HV Liquid Fuels plans expansion in this region to avoid unnecessary transportation costs and lines.
- b. The capacity for processing petroleum at Leuna is to be raised to 500,000 or 600,000 tons in 1954.
- c. Production of aromatics is to be increased. For this, an agreement with Leuna is necessary. Also, it must be decided whether the production of gasoline or of Diesel fuel is to be expedited. At present the production of both is about equal. The extraction of about 16,000 tons of aromatics at Leuna is planned. This quantity is far too low and can possibly be increased.
- d. At Boehlen, production of 35,000 to 49,000 tons is planned. The first figure can be attained with maximum gasoline production. To attain the second figure, an increase in Diesel fuel production is necessary. The production of phenol has not yet been decided upon. Leuna has planned an increase in phenol production from 7,000 tons in 1954 to 11,000 tons in 1960.
- e. Investments: 800,000 DME planned, not counting Leuna and the projected Lausitz installation.

Item	<u>HV Synthetic Products (Kunststoffe)</u>		Remarks
	Unit	1954	1960
<u>Investments</u>			
Tire Industry			
Synthetic fibers			
Rubber manufacture	Million DME		525 for years 1956 - 1960
Cellulose			No increase, but more different types planned. Contrary to the demands of light industry, no production of viscose artificial silk is planned.
Viscose cord silk	tons	4,300	8,000
			This increase is urgently needed to take care of increased production of PKW tires. Expansion will take place in Filmfabrik Wolfen, since here no great changes in construction are necessary. A simultaneous expansion in the Leipzig cotton mills is absolutely necessary, otherwise increased production of this item is senseless.
Artificial acetate silk			Production is to be raised to 5 tons per day.
Fine perlon silk			Production is to be raised from 1,000 tons in 1956 to 2,000 tons in 1960. Contrary to the original plan, capacity will be expanded at Wolfen, where labor conditions are better, rather than at Schwarza.

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Perlon cord silk Production will remain constant at 500 tons.

Perlon threads
B and C Production to be increased from 1,040 tons in 1956 to 3,000 tons in 1960. Type B will be increased until its production reaches the level of production of Type C.

Acet crylon (Orlon) Production to be raised from 500 tons in 1955 to 5,000 tons in 1960, depending on production of necessary raw materials, particularly acrylonitrile, by HV Heavy Chemistry.

Terlene Production to be increased from 10 tons in 1955 to 1,800 tons in 1960. The production of this completely synthetic fiber is desirable because of its quality of retaining its shape, and consequently its use for outer garments. Moreover, the Council for Mutual Aid should make an agreement for increasing production of crylon in East Germany and expanding production of terlene in the Czechoslovak Republic.

PC-fibers Production to be increased from 600 tons in 1956 to 1,400 tons in 1960. By this production, existing capacity of Filmfabrik Wolfen will be fully utilized. No expansion can be undertaken.

Cellophane 720 It is urgently necessary to begin production of this material to cover the large demands of the packing industry. Packing with other artificial materials is too expensive and not suitable for foodstuffs.

Linters (Eilenburg) Production to be raised from 1,800 tons in 1956 to 12,500 tons in 1960. This production is intended for coppered artificial silk (Kupferkunstseide) and triacetate cellulose.

Edible and fat yeast
(Maeher- and Fetthefe) Production to be expanded from 2,200,000 kgs. to 6,000,000 kgs.

Elastics Production is to be increased by 100 percent

Pressed phenol-plastics	from 8,000 tons	to 15,000 tons
Amino-plastics	from 3,500 tons	to 7,000 tons
Total duroplastics	from 11,500 tons	to 22,000 tons
PVC without filler	from 35,000 tons	to 60,000 tons
Polystyrol	from 1,100 tons	to 5,000 tons
Acetate (Vinyl acetate)	--	5,000 tons
Polyethylene	--	2,000 tons
Polymeta-acrylic acid	--	250 tons
Polyisobutylene (Cpanol) Leuna	--	1,000 tons
Styloxid (sic) resin	--	500 tons
Triacetate cellulose	--	5,000 tons

Laminated pressed material Production to be increased from 1,500 tons in 1954 to 2,500 tons in 1960.

Celluloid plates Production to remain constant at 600 tons.

Motor truck tires The necessary investments will amount to between 120 million DEM and 150 million DEM. According to the discussion with the machine construction industry, production must be raised from 1.2 million units to 2.2 minimum (2.8 maximum). In this is included exports of about 450,000 units, principally for the China trade.

Cell rubber (foam rubber, sponge rubber, and Porokrepp) Production to be increased from 2,000 in 1954 to 8,000 tons in 1960. This production is especially useful for the upholstering industry and for vehicles. Tests have shown that cell rubber cannot be replaced by Zelligelite which lacks the necessary elasticity.

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Conveyor belts Production to be raised from 1,500,000 square meters to 2,500,000 square meters, including 500,000 square meters for export.

Cone belts Production to be increased from 1,500,000 meters in 1954 to 3,000,000 meters in 1960.

Investments: The remainder of the rubber industry is to be raised from 111,000,000 DME in 1954 to 150,000,000 DME in 1960. The increase will be allotted especially to technical products and rubber articles. For the above production, raw material needs will be as follows:

Synthetic rubber - approximately 40 percent to 48,000 tons of Buna
 Natural rubber - approximately 400 percent to 13,200 tons

about half of the above production is allotted to individual industries (tire industry, miscellaneous rubber goods industry).

In the photographic industry production is to be increased as follows:

	1954	1960
Raw film	14,630,000 square meters	20,000,000 square meters
Cinema film-	201,000 square meters	300,000 square meters
color, negative		
Cinema film-	2,850,000 square meters	3,500,000 square meters
color, positive		

Expansion of colored film production must be weighed very carefully. Export needs are the decisive factor. Export figures must be checked to see whether the Soviet Union will take as much color film in the future as in the past. Photographic paper production is to be increased from 7,000 square meters to 16,000 square meters. Sufficient raw materials must be acquired; a contract must be made with light industry for the increase of the manufacture of photographic paper, particularly with regard to the delivery of linters for this production.

Item	Unit	Heavy Chemistry		Remarks
		1954	1960	
PCU powder	tons	33,000	48,000	In order to reduce the use of carbide, BK Bitterfeld is planning a cracking installation
Polystyrol	tons	--	19,180	
Urea	tons	1,240	12,000	
Dicyandiamide	tons	6,474	12,074	
Buna	tons	68,000	84,000	Here also, to reduce the use of carbide, research must find means to secure Buna from ... 3/
Plexiglass (Piesteritz)	tons	--	480	It is planned to produce Ekelen(sic) instead of Astralon
Caprolactam	tons	2,800	5,400	
Adipin acids	tons	430	5,500	
Polyacrylonitrile	tons	18	5,540	
Phenol	tons	6,900	11,000	For this Leuna needs about 200,000 tons of light oil. Procurement will be difficult because of needs of HV liquid Fuels
Primary nitrogen	tons	298,000	370,000	Production is to reach 315,000 tons in 1956, 400,000 tons in 1961

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... production is to be increased from 990 megawatts in 1964 to 1,280 megawatts in 1965.

4. Summary

a. Total estimated financial requirements for the Chemistry Division are about 4,000,000,000 DME.

b. The HZ chiefs made a rough guess that exports would amount to about 1,200,000,000 to 1,500,000,000 DME. These somewhat low figures do not take into account the considerable increase in volume of exports for the industries such as Machine Construction and Light Industry which will profit from the expanded production of the Chemistry Division.

Comment: eff means effektiv, or the actually mined gross quantity of the item. It includes nonfluorbearing minerals.

Comment: t means tons of nitrogen content, which is only 20 percent of the gross weight of the item.

Comment: sentence is not completed on raw document.

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Item	Unit	1954	1960	Remarks
Nitric acid	tons	26,000	38,000	
Nitrogen fertilizer				
Ammonium sulfate		No Change		
Calcium ammonium nitrate (Kalkammonsalpeter)	tons	422,000	589,000	Increased production planned for Farbenfabrik Wolfen and EK Bitterfeld
Mixed fertilizer (Piesteritz)	tons	-	290,000	eff. 1/ With this production are included 240 tons of rare soils as by-products urgently needed for other production. The production of Kalkstickstoff is not to be increased.
Phosphorus fertilizer	tons	87,000	200,000	
Superphosphate	tons	-	80,000	By inclusion of Goswig
Mixed phosphate	tons	-	37,000	Includes Dessau with 10 tons
Nitrogen lime phosphate	tons	-	60,000	P ₂ O ₅
Thomas meal	tons	-	10,000	P ₂ O ₅ A method of producing in addition to the kiln method is being developed
Fuel VK	tons	242,000	351,000	
Fuel DK	tons	111,000	175,000	
Caustic soda	tons	239,000	371,000	In 1955 it is planned to produce 45,000 tons in Bernburg
Chlorine	tons	190,000	326,000	
Hydrochloric acid		Production to be raised	by 12,000 tons	
Soda	tons	390,000	555,000	Bernburg production to be raised by 143,000 tons; Stassfurt 20,000 tons
Aluminum	tons	24,000	41,000	
Magnesium	tons	-	10,800	This production must be taken in connection with magnesium chloride. The export possibilities for magnesium must be examined
Alumina	tons	41,300	80,000	The Lauta installation can provide 60,000 tons. For the remainder (20,000 tons) the necessary installations must be built in EK Bitterfeld and Farbenfabrik Wolfen
Hydrofluoric acid	tons	3,900	6,000	
Cryolite	tons	-	5,840	The deterioration of the Dohna Fluorwerke makes necessary the construction of a new factory. The Dohna works must be shifted because they are ruining the vegetation of the area.

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Item	Unit	1954	1960	Remarks
Sulphuric acid	tons	-	500,000	The construction of a Gipschwefelsäure plant in Goswig is planned. Sulphur burning for production of sulphuric acid must be stopped as soon as possible.
Carbide	tons	-	348,000	For solvents, Melamine, etc
Organic solvents	tons	720	3,000	
Acetone	tons	3,600	7,200	
Butylacetate	tons	-	10,800	
Ethyl benzene	tons	-	35,800	
Trichloroethylene	tons	-	20,000	
Methylenchloride	tons	-	2,400	This position must definitely be increased, otherwise the planned production of tri-acetate cellulose is useless.
Methanol	tons	-	120,000	
Carbon tetra- chloride	tons	-	9,000,000	
Organic dyestuffs	tons	3,244	5,975	The variety must be increased, especially that of light-resisting dyes. No production of Indanthrene and Anthrasene-dyestuffs is planned, for the outlay would be too costly, and greatly expanded production in Poland is planned.
Synthetic tanning substances	tons	1,200	3,210	Since HV General Chemistry is also planning increased production of this item, emphasis must be placed on improvement of quality.
				It is planned to increase production largely on a sulfite solution base (Sulfiteblauge-basis) instead of a phenol one.
Palatinols	tons	-	8,000	
Trihexyl phosphate	tons	-	600	
Vulcasite	tons	-	1,275	
Gofatite	tons	-	725	It is planned to change this position to styrol resins

It is planned to increase the capacity for production of the following items, as well as to extend their varieties:

Pharmaceutical products
Insecticides
Pentachlorophenol

Rongalite (sic)
Hydrosulfite
Potassium barium chromate
Zirconium dioxide
Tetraethyl lead

At Leuna or Welfen

Investments: 1,945,000,000 DME

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Carbide	tons	-	948,000	For solvents, Melamine, etc.
Organic solvents	tons	720	3,600	
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Trihexyl phosphate	tons	-	600	
Vulkazite	tons	-	1,275	
Zofatite	tons	-	725	It is planned to change this position to styrol resins.

It is planned to increase the capacity for production of the following items, as well as to extend their varieties:

Pharmaceutical products
Insecticides
Pentachlorophenol

Rongalite (sic)
Hydrosulfite
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At Leuna or Wolfen

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